Changing Dynamics of Fiscal Federalism and Social Sector in India

Synopsis

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1.0 Background

Fiscal federalism, one of the most important pillars of the success of democracy, is described as financial relations between units of government in a federal government system. These relations encompass fiscal resource management of both centres and states, collective fiscal stability and consolidation, and most importantly inter-governmental transfers, which usually reflect fundamental societal choices, i.e., behavior of households, firms, and the governments, and thereby the economic activity. Fiscal federalism provides oxygen to unique cooperative federal model; it broadly comprises allocation of rights and duties related to taxation and expenditure and the system of transfers between different jurisdictions.

India is a welfare state and the largest democracy in the world governed by an elaborated and detailed written constitution. The Preamble of Indian Constitution states that sovereignty vests not in the Parliament but in the people of Union of India. It has used terms like socialist, social and economic justice, equality etc. which indicate that the state would extensively involve in the social welfare of people and would try to establish an egalitarian society. A socialist state strives to achieve many ideals; prominent among them are removal of inequalities in the distribution of economic resources, equality of opportunity for employment, social security, health, education, and finally, establishment of a welfare state. Being a socialist state, the government of India is required to take steps to ensure that the minimum facilities of life are provided to every person, and there are equalities of income and material resources as far as democratically possible.

Fiscal federalism in India is governed by seventh schedule of Constitution, Finance Commission set-up under article 280 of the Constitution, and the erstwhile Planning Commission (now replaced by National Institution for Transforming India (commonly called as NITI Aayog). The seventh schedule of the constitution lays down subjects for the union list (functions assigned to federal government), concurrent list (shared functions between federal and states governments), and the state list (functions exclusively assigned to state governments). Finance commission is bestowed with the exclusive powers to make recommendations to the President as to make distribution of the net proceed of taxes between union and states. These recommendations aim at increasing autonomy of states and balancing fiscal space between union and states. The erstwhile planning commission was playing a critical role in inter-

governmental transfers (tax devolution, grant-in-aid, and transfer of resources outside the award of finance commission) of resources from union to states including transfers under central sector schemes and centrally sponsored schemes.

In recent years, union-state fiscal relations in India have undergone significant changes. Three landmark changes since 2015-16 have been: the abolition of the Planning Commission and the subsequent creation of the NITI Aayog on 1 January 2015; fundamental changes in the system of revenue transfers from the centre to the states by providing higher tax devolution to states from fiscal year 2015-16 onwards based on the recommendations of the Fourteenth Finance Commission; and the Constitutional amendment to introduce the Goods and Services Tax (GST) and the establishment of GST Council for the central and state governments to deliberate and jointly take decisions (Chakraborty, 2019).

In the post-GST scenario, the central government has far greater domain where it may tax. These may include income tax, consumption of goods and services (CGST), taxing foreign transactions (exports and imports), and capturing natural resources rents, such as spectrum auctions. State governments may only tax the consumption of goods and services (SGST) and agricultural incomes, while the local bodies have even more limited power to tax which is largely confined to property tax. Central government collects around 60 percent while its expenditure responsibility for carrying out its constitutionally mandated responsibility such as defence etc., is only to the tune of 40 percent of the total public expenditure, thus arises the vertical imbalance (Kelkar, 2019). Although increased vertical devolution may not have increased overall fiscal space to states, it has increased fiscal autonomy available to states, as the share of general-purpose transfer in total transfers has increased considerably. Further, collective decision-making process under GST has put an end to autonomy of union as well as state governments in determining their indirect tax policies. However, central government has assured the states with less than 14 percent annual revenue growth rate to compensate for the shortfall in tax revenue, if any.

2.0 Social Sector in India

Social Sector in India mainly consists of social services and rural development. As per the Constitution, major responsibility of expenditure on social sector lies with the state governments. The poor outcome indicators of majority of the Indian states are often related with poor expenditure allocation for this sector. States historically spend a very meagre amount of their GDP on social sectors, and this has often

been cited as a major reason for the human development backlog across Indian states (Dev and Mooij 2002; Shariff et al. 2002). Even though primarily a state priority, central government also do spend on social sector, the combined expenditure of the states and centre has always been under the United Nation's mandate of 6 percent of GDP in India (Hari, 2018).

Since independence, social welfare has been at the centre of India's policy. From the first five-year plan, despite scarcity of economic means in the initial 20-25 years, government of India the government focused on welfare policies and inclusive development; it launched programs and schemes aiming at social welfare (agriculture and rural development, employment and labor welfare, healthcare, education etc.). India adopted the model of globalization in 1991 with the hope that it would bring prosperity to the nation in terms of higher production and economic growth. Indeed, globalization resulted in increase in GDP (gross domestic product) by 8-9 percent, manifold increase in international trade and foreign investment, and India emerged as global economic power; but, as observed by many researchers, the benefits of globalization have been confined to elite sections of society, and its impact in terms of social welfare has been by and far not encouraging.

According to WHO Global Health Expenditure database 2020, per capita health expenditure in India (Rs. 190.74) is much lower than that of other countries like China (Rs. 962.29), US (Rs.11702.41) and others. Although, share of expenditure on healthcare and education in total social sector expenditure by all Indian states has increased from 39.8 percent and 41 percent during 2014-15 to 42.5 percent and 42.4 percent in 2022-23 (Reserve Banks report of State Finances: A Study of Budgets of 2022-23), inter-state analysis shows that there exists an inequality among the states in terms of per capita social sector expenditure. It is observed that per capita expenditure of Kerala, Tamil Nadu and Maharashtra on social sector is much higher than that of Bihar, MP and UP.

3.0 Literature Review

In the existing literature, studies have focused on different aspects such as federal transfers, fiscal decentralization, revenue diversification, centrally sponsored schemes, and their impact on expenditure pattern, fiscal position and performance, and the social policy of states. Review of some prominent studies are presented below.

3.1 Studies on the Impact of Federal Transfers on States' Expenditure Pattern

Reddy (1976) tried to identify determinants of expenditure differentials taking sample of 16 Indian states for two different years 1962-63 and 1972-73. He observed federal transfers and debt as prominent factors influencing expenditure of states. Roy and Pillai (1976) examined the impact of various forms of federal transfers on expenditure pattern of selected 17 Indian states and found an evidence of expenditure simulative effects of federal transfers on states. They mentioned that state governments had long been dependent on the centre for a substantial part of their budgetary requirements.

Singh and Vasishtha (2004) examined the impact of the influences of economic and political importance of states on the level and composition of per capita transfers to states, as well as the differences in temporal patterns of planning commission and finance commission transfers. They observed that states with greater bargaining power seem to receive larger per capita transfers, and that there is greater temporal variation in planning commission transfers. Karnik and Lalvani (2005) while examining flypaper effect in 14 Indian states during 1980–81 to 1997-98 and 243 urban local governments of Maharashtra during 1993-94 to 1998- 99 observed existence of flypaper effect and fiscal replacement type of asymmetry; but the evidence of asymmetric response to federal transfers was ambiguous.

While analyzing expenditure pattern, and distribution net effect of the discretionary transfers on states, Chakraborty, Mukherjee, and Nath (2010) found increase in the volume of non-formula-based grants as compared to formula-based grants, and within non-formula transfers, increase in the share of off-budget transfers (1.06 percent of GDP) as compared to on-budget transfers. The results of econometric analysis conducted to examine the relationship between central transfers and GSDP indicated a positive relationship between non-formula-based transfers with GSDP.

Balasubramanian, Govindadass and Panda (2012) examined the fiscal equalization aspect of finance commission transfers in India using the fixed effect panel regression models and observed that these transfers are regressive in nature and fails to equalize fiscal capacity of the States. Panda and Velan (2013) analyzed incentive effects of federal lump-sum transfers on states' expenditure and fiscal responsibilities using panel data of 22 states for the period from 1980-81 to 2004-05. They noted that lump-sum transfers are more stimulative on states' expenditure pattern. To understand the impact of

tax transfers and grants from the central governments to the states on the latter economic growth, Kulkarni and Dhume (2018) observed positive impact of tax transfers, but a mixed impact of grants on economic growth of the states.

In the framework of fiscal federalism, federations have tried to tackle two important issues; these are vertical imbalance and horizontal imbalance. Vertical imbalance is caused by fiscal asymmetry in powers of taxation vested with the different levels of government in relation to their expenditure responsibilities prescribed by the constitution, while horizontal imbalance arises due to difference in capacity to tax amongst states as against the expenditures required for providing public goods of comparable quantity and quality to those residing in their states leading to vast regional imbalances in terms of per-capita incomes, stage of demographic transition, physical infrastructure levels, social capital endowment, natural resources availability such as water, mineral resources, and geographical features such as hilly terrain or desert area. With this view Srinivasan and Durai (2022) analyzed horizontal and vertical imbalances in India and showed how it adversely affected the fiscal performance of regional governments. The study empirically exhibited that the vertical fiscal imbalance has been increasing over recent years. Dwivedi and Shrivastava (2022) conducted a comprehensive analysis of Article 282, centrally sponsored schemes, and its use and implications on fiscal federalism in India. The study clearly demonstrated erosion of states' autonomy, i.e., horizontal imbalance or regional disparity.

3.2 Studies on Fiscal Decentralization and Fiscal Deficit

Fiscal decentralization primarily consists of devolving revenue sources and expenditure functions to lower tiers of government. By bringing the government closer to the people, fiscal decentralization is expected to boost public sector efficiency as well as accountability and transparency in service delivery and policymaking. Focusing on importance of inter-governmental fiscal relations, De Mello (2000) viewed that coordination failures in inter-governmental fiscal relations may result in a deficit bias in decentralized policymaking, particularly in the case of developing countries. Kalirajan and Ostuka (2012) in a study on the impact of fiscal decentralization on social infrastructure and rural development in India observed that the Government of India within its federal framework has been fostering development equitably across its states, particularly through health and education expenditures aimed

at improving human capital development.

Hung and Thanh (2022) analyzed simultaneous relationship between fiscal decentralization, economic growth, and human development using the panel data of 18 countries over a period from 2011 to 2017. They observed a significant relationship between fiscal decentralization, economic growth, and human development. They found a positive impact of fiscal decentralization on economic growth, but a negative impact on human development. Bhutani and Mishra (2020) while reviewing India's federal system outlined key issues in fiscal decentralization and the anomalies in expenditure and revenue assignments between the higher levels of government and the urban local bodies. They suggested policy measures to put Indian urban local bodies on a strong footing in the public finance map of India.

3.3 Studies on the Impact of Centrally Sponsored Schemes

Centrally sponsored schemes, discretionary in nature are implemented on national priority basis to motivate states to undertake programs at the provincial level. Saxena (2007) observed that centrally sponsored schemes have made states depend more on the centre. He mentioned that implementation of these schemes needs political commitment, inter-sector coordination, capacity building and constant monitoring. Duggal (2009) mentioned that increase in central government's expenditure towards NRHM did not stimulate states' spending to reach the main objective of 21 targeting vulnerable sections and backward regions due of increased fungibility of states' resources away from health sector. The differences in the government's own key priority programs within NRHM itself made the central funds remain unutilized. The study emphasized the need of political willingness and bureaucratic mindset along with decentralized planning and implementation process for success of the scheme.

Gayithri (2012) examined health sector expenditure in Karnataka by taking district as a unit of the study. She mentioned, though health sector expenditure has increased and the gap between fund allocation and expenditure has reduced drastically, there is an urgent need for pegging spending to a decent level as part of ensuring a balanced spending on this sector which is highly vulnerable to the state fiscal stress. Sho also mentioned that for effectiveness of public spending central government should ensure timely funding and consider local priorities to avoid the diversion of funds from the targeted areas. Chandram (2013) in a comparative study on trends in health and rural development in six Indian states (Bihar, Madhya Pradesh, Odisha, Rajasthan and Uttar Pradesh, and Himachal Pradesh)

observed increased prioritization of spending towards rural development as compared to health sector among relatively poor states. The study noticed fungibility of resources from health sector towards rural development.

3.4 Studies on Revenue Diversification and its Impact on the Fiscal Position of States

Although revenue diversification or reliance of states on multiple sources is a protective tool, until the 1980s less attention was given to its role in the revenue structure of states and local government. With the initial works of Shannon (1983) and Suyderhoud (1994), diversification index got prominence in the analyses of revenue structure. Some researchers consider revenue diversification as a tool to reduce fiscal stress faced by states, while others view that diversification leads to inefficiency in spending and a higher tax burden (Wagner, 1976) and even equity, efficiency and adequacy which are the goals of tax policy cannot be maintained with diversified revenue structure (Ladd and Weist, 1987). Shannon (1987) viewed that revenue diversification is a desirable goal of the governments; it minimizes the loss of revenues during severe fiscal crisis and helps governments to raise revenue through multiple tax sources during the periods of recession.

Shamsub and Akoto (2004) in a study on the impact of fiscal structures of sub-national governments on the fiscal performance of 49 selected states mentioned that revenue diversification lowers fiscal stress; hence, it should be the strategy of sub-national governments to enhance their fiscal performance. Maleckaite (2012), in an empirical study on the relationship of revenue diversification and debt in US municipal governments observed that revenue diversification helps in debt sustainability. Some researchers observed a negative relationship between revenue diversification and revenue volatility. Yan (2012) in a study on empirical analysis of the relationship between revenue diversification, volatility and economic instability found that revenue diversification reduced states' revenue volatility. A similar finding emerged from the study by Schunk and Porca (2005), and Carroll (2009). In contrast, Ryu (2013) found that revenue diversification failed to smoothen revenue volatility. He, however, observed evidence of a positive association between revenue growth and revenue diversification.

3.5 Studies on the Impact of Fiscal Federalism on Economic Growth

Rao (2000), in a study observed increasing trend in structural deficits due to anomalies in assignments both between centre and states; and mentioned that both centre and states are guilty of fiscal profligacy.

He also mentioned that states on their part are not bothered to observe fiscal discipline, and they have found several ways to soften their budget constraints at the cost of macroeconomic stability. Singh and Srinivasan (2006) examined India's federal system in the context of prospects for India's future economic growth and development. They mentioned that India's centralized political and bureaucratic control and monitoring is neither very effective nor accountable to the larger public, but recent move towards devolution to local bodies has potential to bring about greater efficiency and accountability. Aziz (2010) in a study on the role of finance commission in strengthening financial position of Uttar Pradesh, mentioned that the correction observed in the state finances in recent times is due to larger devolution from the centre as well as the debt relief provided in accordance with the schemes of Finance Commission.

Rao (2011) attempted to analyze the effect of central to state specific purpose transfers as well as the incentive schemes recommended by various Finance Commissions at state level. The results indicated that the experience of incentivizing reforms at the state level can neither be termed as unqualified success by any means, nor is it a total failure. He further mentioned that there are elements of incentives which have succeeded though, but on the whole, it has not been able to accomplish the objectives in entirety such as ensuring standards of essential physical and social infrastructure, motivating tax reforms in states, urban renewal or fiscal prudence. Feld et al. (2016) analyzed the impact of fiscal federalism on economic growth and advocated for decentralization to increase growth more in developed countries than in developing countries.

Reddy (2019) analyzed the impact of changes in the fiscal responsibility framework, asymmetric implementation of GST, and controversies in the terms of reference in fifteenth finance commission on India's economic development. He mentioned that the transfers outside FC's recommendations could play a legitimate role in economic development provided appropriate fiscal space is identified for the purpose without adversely affecting states, and an appropriate institutional arrangement is made for such transfers. Yadav et al. (2020) provided an overview of GST model and outlined the advantages and disadvantages of current structure in taxation policy. They mentioned that the success of GST would depend on high degree coordination between the federal government and the states.

3.6 Studies on fiscal federalism and social sector development

Role of state and public policy on economic growth is well documented in the literature, but there is paucity of research on the role of fiscal federalism and the development of social sector. Among a few, Joshi (2006) mentioned that Indian states spend a very meagre amount of their GDP on social sectors, especially on education and healthcare and this acts as a major reason for the human development backlog across Indian states. Literature on receipts of central transfers in states and its net effect on states' expenditure has given ambiguous results. Chakraborty (2016) estimated that the net gain to the state of Bihar through devolution of more tax share compensates more than loss of direct grants. In the case of Maharashtra, Shetty (2016) showed the unutilized fiscal space post fourteenth finance commission. World Bank (2016) also had shown a net gain to states post FFC recommendations.

Existing studies have an upward bias in the net gain and the corresponding increase in the social sector expenditure. Comparison based on revised budget figures gives a decline in the central transfers and the expenditure on social sectors as a percentage of gross state domestic product (GSDP) in several states (Choudhury, Mohanty, and Dubey, 2016). To examine the impact of each tier of government's tax autonomy on residents' social welfare Omodero (2022) analyzed the value of revenue fiscal decentralization in increasing citizens' social welfare in Nigeria. He applied multiple regression on data for a period spanning from 2007 to 2020. Based on results, he stressed on the need to reassess the tax autonomy of the three tiers of government to offer additional taxing powers to lower-level governments and achieve better economic growth prospects.

4.0 Rationale of Study

The recent developments (formation of NITI Aayog, change in the system of tax devolution, and introduction of GST) have led to paradigm shift in the nature and pattern of fiscal federalism in India. Now, the concept of plan and non-plan expenditure is replaced by revenue and capital expenditure, idea of special category states is removed, and increased vertical devolution based on the recommendations of fourteenth finance commission.

India is going through a transition in its inter-governmental relations. The asymmetric federalism, inherent to the Constitution, has accelerated and mutually reinforced with political centralization since 2014, making the central government extractive rather than enabling. In view of Kalaiyarasan (2022)

states are losing their capacity to generate revenue by surrendering their rights in the wake of the Goods and Services Tax (GST) regime, their expenditure pattern too is distorting by the Union's intrusion, particularly through its centrally sponsored schemes.

Even though, India's new economic policy framework has been quite successful in creating a favorable environment for rapid economic growth, attention has not been paid adequately to development of social sector like basic education, healthcare etc. Theories of endogenous growth state that apart from physical capital and labor, human capital (education and healthcare) is one of the important inputs for production growth. Therefore, developing countries like India should invest a significant portion of their resources in the health and education. In India, where a large segment of population depends greatly on public provision of education and healthcare, public investment is not only crucial but also expected to be high in this respect.

Researcher senses a visible red alert in the social sector of India. If the insufficiency and inequality in expenditure continues to persist, it will not only hamper India's human capital formation but also its economic growth in long-run. Only increase in social sector expenditure will not serve our purpose, policymakers also will have to pay attention towards efficient allocation of resources to target the actual needy section of population, so that benefits of increased expenditure can trickle down to the lower mass of population.

Although, many researchers in the past have highlighted issues related with the role of constitutional body (the Finance Commission) in providing conditional and unconditional transfers to the states, fiscal decentralization, revenue diversification, and use of the transfer system to achieve development and policy outcomes in different economic settings, to the best of researcher's knowledge, by now, no scientific study is available on changing phase of union – state fiscal relations, and their impact on economic growth and social sector development of states in India.

5.0 Research Objectives

Proposed research work, besides scrutinizing intricacies, and trajectory of union – state relations, aims to investigate the extent to which recent reforms have been implemented in spirit, and to analyze the impact of changes in the system of union – state revenue transfers on economic growth and social sector development of selected Indian states. The key objectives of intended research work are as follows.

1. To develop understanding about major elements of fiscal federalism in India with a focus on the states' economy.
2. To scrutinize trajectory (trend and pattern) and intricacies (major issues) of union – state fiscal relations in India.
3. To analyze the impact of fiscal transfers on economic growth of selected Indian states.
4. To examine efficiency and adequacy of federal system in social sector (healthcare and education) development of selected Indian states.
5. To propose a suggestive framework for making a balance between fiscal federalism and states' economic growth.

6.0 Research Methodology

Specific methodology sketched out to accomplish above objectives is as follows.

1. The understanding of the major elements of fiscal federalism in India and Indian states would be developed through secondary information available in research papers, working papers and technical reports, database of Reserve Bank of India (RBI) and Ministry of Finance (GoI), Budget Documents, Reports on Currency and Finance (RBI), Reports of Union Finance Commissions (GoI), and Centre for Monitoring Indian Economy (CMIE).
2. Major issues pertaining to union – state fiscal relations in India will be scrutinized with the help secondary information available in research papers, working papers, technical reports, and newspapers. The trend and pattern of fiscal transfers from centre to state in India will be analyzed by using regression methodology on secondary data available in the database of Ministry of Finance (GoI), and the Reports of Finance Commission (GoI).
3. To analyze impact of fiscal transfers on economic growth of selected Indian states, researcher will use panel data analysis.
4. The efficiency and adequacy of federal system in social sector (healthcare and education) development of selected Indian states will be examined by using stochastic frontier analysis.
5. To suggest framework for making a balance between fiscal federalism and states' economic growth will be constructed by using fixed effects least squares method. It will be based on the analysis of the impact of fiscal decentralization, autonomy, and central intervention on selected Indian states'

economic growth.

6.1 Sample: The proposed study will focus on top five Indian states selected based on their contribution to GDP. These are: Maharashtra, Tamil Nadu, Karnataka, Gujarat, and Uttar Pradesh. The GSDP at current prices of these states for financial year 2021-22 is given below.

Table 1: The GSDP at current prices of these states for financial year 2021-22

States	Base: 2011-12 (₹ Lakh)
Maharashtra	298102400
Tamil nadu	206543628
Karnataka	204937896
Gujarat	194410700
Uttar Pradesh	186322112

(Source: Economic Survey of India 2021-22)

6.2 Duration of Study: 2010 onwards

6.3 Data Source: Research papers, working papers and technical reports, database of Reserve Bank of India (RBI) and Ministry of Finance (GoI), Budget Documents, Reports on Currency and Finance (RBI), Reports of Union Finance Commissions (GoI) and Centre for Monitoring Indian Economy (CMIE), and RBI Bulletins.

6.4 Analytical Tools: Basic descriptive (Mean, Dispersion, Coefficient of variation), Regression analysis, Panel data analysis, Fixed effects least square method, and Stochastic frontier analysis.

6.5 Software to be used: EViews 12.0

7.0 Expected Implications

The proposed study will have implications for policymakers related to fiscal federalism. It will focus on issues and challenges pertaining to the federal structure and social sector (Healthcare and Education) in India. This study intends to highlight recent instances that hamper fiscal federalism in India and will suggest framework for making a balance between fiscal federalism and states' economic growth. The study will also try to justify whether division of responsibilities among federal, state, and local governments have improved economic efficiency and achieved various public policy objectives.

Proposed Chapter Plan

1. Introduction
2. Theoretical Foundation and Review of Literature

3. Trajectory and Intricacies Fiscal federalism in India
4. Impact of Fiscal Transfers on Economic Growth of Selected Indian States.
5. Efficiency and Adequacy of Federal System in the Development of Social Sector in Indian States
6. Suggestive Framework of Fiscal Federalism
7. Conclusion

References

- Aiyar, Y. and Kapur, A. (2019) The centralization vs decentralization tug of war and the emerging narrative of fiscal federalism for social policy in India. Regional & Federal Studies. No. 29:2
- Aziz, G. (2010). Fiscal Scenario of state Uttar Pradesh, State finances. January 29. http://dx.doi.org/10.2139/ssrn.1544162.
- Balasubramanian, G., Govindadass, J, and Panda P. K. (2012). Finance commission transfers and fiscal equalization in India: Evidence from panel data. International Journal of Finance Policy Analysis. No. 4(1)
- Bhanumurthy, N. R. (2017). What explains regional imbalances in public infrastructure expenditure? Evidence from Indian States. Asia-Pacific Development Journal. December.
- Bhutani, S. and Mishra, A. (2020). India's perverse fiscal federalism: Some suggestions for the 15th Finance Commission. Journal of Public Affairs. No. 1(1).
- Chakraborty P. (2016). Restructuring of central grants: balancing fiscal autonomy and fiscal space. Economic and Political Weekly, No. 51(6)
- Chakraborty, P. (2019). Fiscal federalism in India. The India Forum. April 19. https://www.theindiaforum.in/
- Chakraborty, P., Mukherjee, A. N., and Nath, H. K. A. (2010). Inter-state distribution of central expenditure and subsidies. Working Paper No. 2012-66. National Institute of Public Finance and Policy, New Delhi. http://www.nifp.org.in.
- Choudhury, M., Mohanty, R. K, and Dubey J. D. (2016). Impact of the recommendations of the 14th FC: central transfers and social sector expenditures in the 1st year. National Institute of Public Finance and Policy, New Delhi. Working paper No. 183.
- Duggal, R. (2009). Sinking flagships and health budgets in India. Economic and Political Weekly,

Vol. 44.

- Dwivedi, R. and Shrivastava, A. (2022). Article 282 and centrally sponsored schemes: Implications on fiscal federalism in India. YMER No. 21(1).
- Feld P. L., Baskaran T., and Schnellenbach J. (2016). Fiscal federalism, decentralization, and economic growth: A meta-analysis. Economic Inquiry. March.
- Gayithri (2012). District level NRHM funds flow and Expenditure: Sub-national evidence from the state of Karnataka. The Indian Economic Journal. Vol. 59. No. 2.
- Hari, K. S. (2018). Cooperative Federalism: Implications for Social Sector Expenditure in India. In Challenges and Issues in Indian Fiscal Federalism: India Studies in Business and Economics. Edited by N.A. Khan. https://doi.org/ 10.1007/978-981-10-6217-9_5
- Hung, T. N. and Thanh, Su D. (2022) Fiscal decentralization, economic growth, and human development: Empirical evidence. Cogent Economics & Finance. No. 10:1
- Joshi, S. (2006). Impact of economic reforms on social sector expenditure in India. Economic & Political Weekly. No. 41(04)
- Kalaiyarasan, A. (2022). The poor state of India's fiscal federalism. The Hindu. 22 July.
- Kalirajan K. and Otsuka K. (2012). Fiscal Decentralization and development outcomes in India: An exploratory analysis. World Development. Vol. 40. No. 8
- Kulkarni, L. and Dhume, A. (2018). Impact of fiscal transfers on gross domestic product of Indian federal states: A panel data analysis. In Challenges and Issues in Indian Fiscal Federalism: India Studies in Business and Economics. Ed. N.A. Khan. https://doi.org/ 10.1007/978-981-10-6217-9_5
- Ladd, H. F., and Dana R. W. (1987). State and local tax systems: Balance among taxes vs. balance among policy goals. In The quest for balance in state-local revenue structures. Ed. Frederick D. Stocker. Lincoln Institute of Land Policy. Property Tax Papers Series No.16.
- Lalvani, M. (2002). The flypaper effect: Evidence from India. Public Budgeting and Finance. No. 22 (3).
- Maleckaite, V. (2012). Strategic path to fiscal sustainability: Revenue diversification and the use of debt by U.S. municipal governments. University of North Texas. Dissertation Report.

https://digital.library.unt.edu/ark

- Mello, De L. (2000). Fiscal decentralization and intergovernmental fiscal relations: a cross-country analysis. World Development. No. 28 (2).
- Mohanty R. K. (2018). Fiscal deficit and economic growth linkage in India: Impact of FRBM Act. In Challenges and Issues in Indian Fiscal Federalism: India Studies in Business and Economics. Edited by N.A. Khan. https://doi.org/10.1007/978-981-10-6217-9_8
- Omodero, C. O. (2022). Fiscal federalism, tax independence and social enhancement. Studia Universitatis "Vasile Goldis" Arad. Economics Series. No. 32(4).
- Panda, P. K. and Velan, N. (2013). Central Fiscal transfers and states' spending in India: An analysis of incentive effect. Economics Bulletin. Vol. 33. No. 2.
- Ramachandram, S. (2013). Democracy and public good provision: A study of spending patterns in health and rural development in selected Indian states. International Development. WP No. 13-133. www.lse.ac.uk/depts/ID.
- Rao, M. G. (2000). Fiscal decentralization in Indian federalism. Institute for Social and Economic Change. WP No. 98. http://www.isec.ac.in/Fiscal_decentralization_in_Indian_federalism.pdf
- Rao, M. G. (2011). Federalism and fiscal reforms in India. In Challenges and Issues in Indian Fiscal Federalism: India Studies in Business and Economics. Edited by N.A. Khan. https://doi.org/10.1007/978-981-10-6217-9_1
- Rao, M. G. (2019). Redesigning the fiscal transfer system in India. Presented in roundtable conference on Fiscal Federalism in India: Contemporary Perspectives at Madras School of Economics. February 22-23.
- Reddy, K. N. (1976). Inter-state differences in social consumption. Economic and Political Weekly. No. 11(24).
- Reddy, Y. V. (2019), New approaches to fiscal federalism in India. Review of Development and Change. No. 24(2).
- Roy, B. W. and Pillai, V. (1976). The allocative effect of intergovernmental flows in less developed countries: A case study of India. Public Finance. Finances Publiques, Vol. XXXI.

- Ryu, S. (2013). Revenue strategies of US states under conditions of economic and political stress: Revenues diversification 1980 to 2011. Arizona State University. Dissertation Report. https://keep.lib.asu.edu/items/152078.
- Saxena, N. (2007). Rural poverty reduction through centrally sponsored schemes. Indian Journal of Medical Research. November.
- Schunk, D., and Porca, S. (2005). State-local revenue diversification, stability, and growth: Time Series Evidence. Review of Regional Studies. No. 35(3).
- Shamsub, H., and Akoto, J. B. (2004). State and local fiscal structures and fiscal stress. Journal of Public Budgeting, Accounting & Financial Management. No. 16(1).
- Shetty, S. L. (2016) Underutilized fiscal space: Maharashtra's budget post fourteenth finance commission. Economic and Political Weekly, No. 51(21)
- Singh, N. and Srinivasan, T. N. (2006). Federalism and economic development in India: An assessment. Munich Personal RePEc Archive (MPRA). June. https://mpra.ub.uni-muenchen.de/ 12452/ 1/ MPRA_paper_12452.pdf.
- Singh, N. and Vasishtha, G. (2004). Some patterns in center-state fiscal transfers in India: An illustrative analysis, Santa Cruz Center for International Economics. WP No. 4(18).
- Srinivasan. R, Durai. S. R. (2022). Fiscal federalism in India: A case for reassigning of tax powers. Centre for Public Finance Madras School of Economics. WP No. 230.
- Wagner, R. E. (1976). Revenue structure, fiscal illusion & budgetary choice. Public Choice. No. 2.
- World Bank (2016). India development update: financing double digit growth. World Bank Group.
- Yadav, J., Singh, A. and Sawan, S. (2020). A constitutional study on GST and its impact on fiscal federalism in India, Journal of Critical Reviews. No. 7(3).
- Yan, W. (2008). The impact of revenue diversification and economic base on revenue stability: An empirical analysis of county and state governments. University of Kentucky. Doctoral Dissertations. https://Uknowledge.Uky.Edu/Gradschool_Diss/619